

PHENIX WEEKLY PLANNING



8/27/2009
Don Lynch

This Week 8/24-8/28

Task

Start Date

End Date

TECHNICAL SUPPORT NOON

Re-test HBD supply line for leaks (pad to mixing house)

Done

Done

De-Cable and remove HBD East to SunySB for repairs

Done

Done

Install Station 1 FEE's & Electronics and connect cables

Done

Done

Move MuID piping, piping supports out of Gap 5 to temporary store area

Done

Done

Move MuID cables and cable tray out of Gap 5 to temporary store area

Done

Done

Test base RPC3 N locking/installation fixture

Done

Done

Assemble HV, experimental gas and N2 gas distribution and install tent

Done

Done

Order & receive parts for gap5 N cable management

Done

Done

Fabricate Base Locking/Installation fixture

Done

Done

Install Station 1 MuTrigger FEE air & water and test

In progress

9/11

Install MuTrigger FEE station 2/3 FEE's & Electronics & connect cables

In progress

9/25

Install MuTrigger FEE station 2/3 air & water plumbing and test

In progress

10/9

Erect PC1 repair tool

In progress

8/31

This Week 8/24-8/28, Continued

Task	Start Date	End Date
Survey tapped holes on MuID5 steel and survey east and west RPC3 N support bases (3 days)	In progress	9/4
Drill and tap MuID gap 5 steel top and north	In progress	9/4
Simulated RPC installation at RPC Factory (practice/tests) commission all installation components base, locking/install, survey, cradle (3 days)	In progress	9/4
Test and commission RPC3N lifting fixtures at factory with S. Kane/designee as witness	In progress	9/4



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Next Week 8/31-9/4

Task

Start Date End Date

Receive complete RPC3 N base, pitch support,
lifting fixtures & $\frac{1}{2}$ octant 7&8 vertical supportIn
progress

9/4

Fabricate RPC3 adjustable $\frac{1}{2}$ octant cradleIn
progress

9/4

Move MuID plumbing rack on pedestal away
From gap 5In
progress

9/4

Disassemble DC/PC1 cables & piping

In
progress

9/10

Move DC on EC to access PC1 east

8/31

9/10

TECHNICAL SUPPORT NOON

Tasks with slipped starting dates

Task

Start Date End Date

Vendor install Ar dewar & vaporizer	8/3	9/30
Install rails and fences on gas pad	8/3	9/30
Install RPC3 N support base & grout (4 days)	8/3	9/11
Install Station 3 N pitch control (unistrut rails) on pedestal and east and west gap 5 north walls and attach to support bases (tall column)	8/3	9/11
Final leak test new Ar dewar/vaporizer and Closeout job	8/28	10/4
Install Empties racks on gas pad	8/31	10/4
First $\frac{1}{2}$ octant ready for installation	9/15	9/15
Install RPC3 N $\frac{1}{2}$ Octants (16 days)	9/15	10/30

MuTRG-FEE Installation Status

Itaru Nakagawa
RIKEN/RBRC

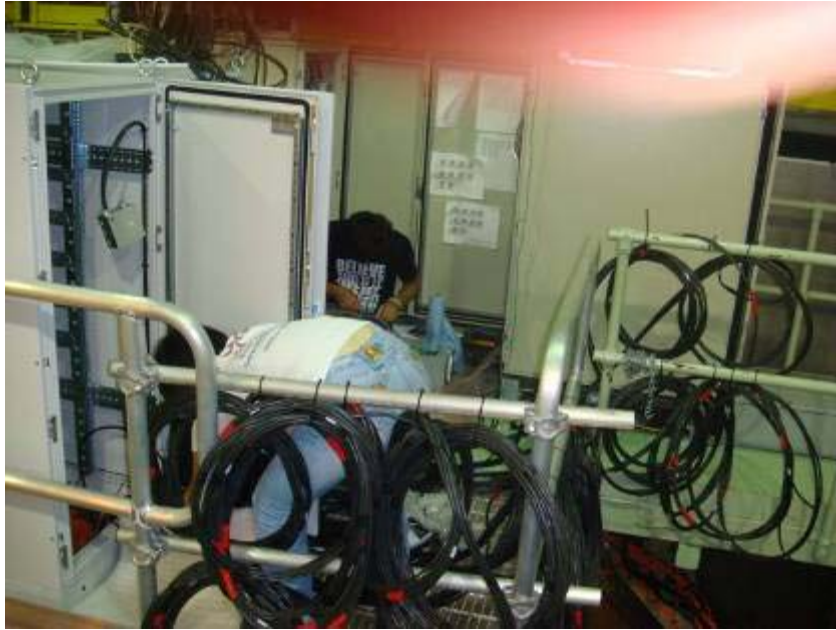
Cabling

Cabling is completed.
Only cable tray for the west
side of MMS needs to be
installed after MMS is moved
to run position.



Install Tray after MMS to Run Position

Trunk Cable Connection



- Completed trunk cable connection to patch bay
- 4 connectors were chopped off. need to repair. ➔ updated on table

LV connection

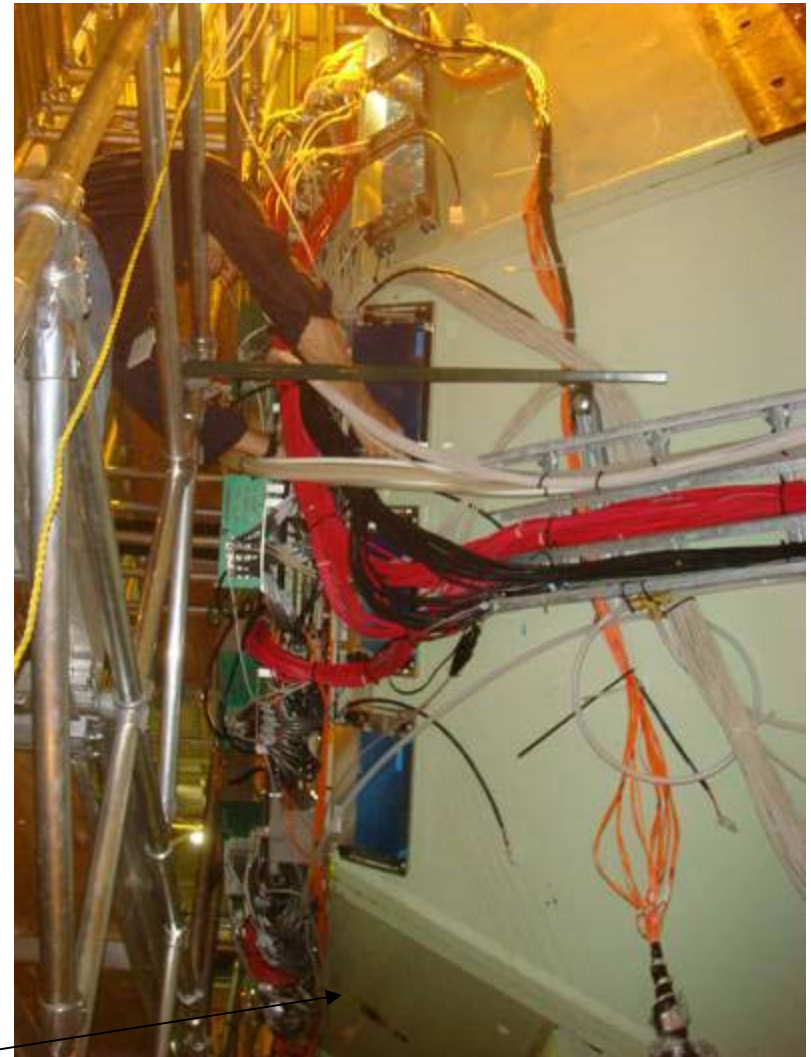
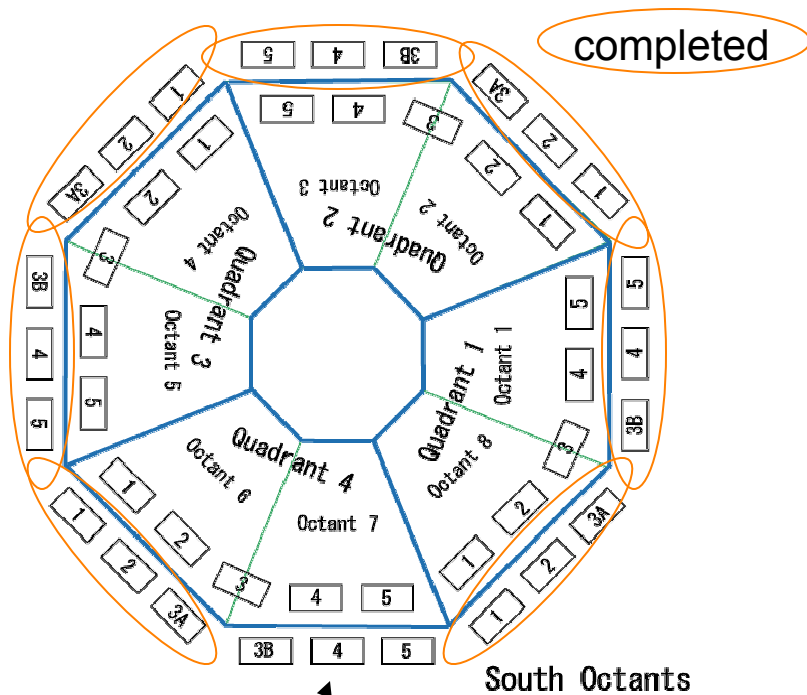


Frank has started connection
LV cables to terminal blocks
Projected day to complete is
Friday.

Temporary power supply
supposed to be replaced by
MegaPacks

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Station-1 Chassis Mount & Plumbing



- Octant-7 Chassis will be mounted this afternoon by Mike Lenz.

Remaining Items To be Done Before Board Installation

- Optical Signal Cable
 - Tray install for trunk cable loop.✓
 - Patch bay install at platform.✓
 - Trunk cable connection.✓
 - Fiber connections to patch bays.(Today)
 - PatchBay(rackroom) - PatchBay (Platform) - Chassis Chain test
→(end of this week)
- LV
 - Megapack Install (Frank)
 - Connection to Terminal Block (Frank) → end of this week
 - LV measurement & tune (1 day)
- Chassis
 - Noise reduction → (end of this week)
 - St-1, Oct-7 Mount & plumbing (Mike Lenz, today)
 - Plumbing Station-2 (John+Mike, 3 weeks)

8/2 All infrastructures will be ready by the end of this week.
We will start installing ADTX boards from next week.

Continuing Tasks currently underway (cont'd)

Task	Start Date	End Date
• Test/replace rack transient suppression	7/20	12/1
• UPS feeds for GTM and GL1 racks	7/20	12/1
• Cordless phones in tunnel	7/20	12/1
• Individual relays on all HV supplies	7/20	12/1
• SF6 alarm to MCR?	7/20	12/1
• More volts to EMCAL FEM's?	7/20	12/1
• Revisit LV systemization/standardization of controls, etc.	7/20	12/1
• Correct wiring of the DCM crates enables	7/20	12/1
• Replace ECB1&2 (ADAM5000s) with a single new ADAM5000E	7/20	12/1
• Replacement OPC server computers	7/20	12/1
• Replace old PCI type RS485 interface boards with USB-Fiber and Fiber-RS485 system	7/20	12/1
• Add single-button ON/OFF controls to some LV GUIs	7/20	12/1
• Determine optimal baud rate for EC North RMC	7/20	12/1
• Remove the temporary FlatPAC in SMT4 and install two new MegaPACs	7/20	12/1

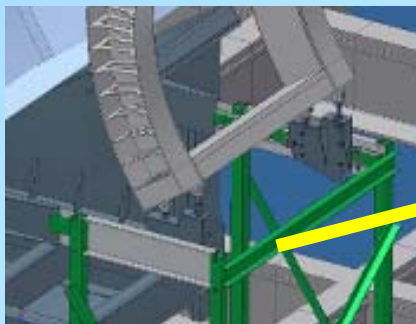
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Continuing Tasks currently underway (cont'd)

Task	Start Date	End Date
• VTX/FVTX LV Dist system evaluation	7/20	12/1
• Prep for production of up to 39 boards in 4 crates (VTX/FVTX)	7/20	12/1
• VTX/FVTX cooling system interlock design	7/20	12/1
• Evaluate possible design for 4x1 GL1 L1 triggers	7/20	12/1
• Test direct ethernet implementaion on Maszi's new HV control interface board	7/20	12/1
• Get air conditioners installed in mixing house	7/20	12/1
• Investigate shed/larger bottles for R134A	7/20	12/1
• Replace damaged compressed air flowmeter	7/20	12/1
• Add check valves to some supply lines (as needed)	7/20	12/1
• Design and build heat exchanger for HBD system	7/20	12/1
• Re-test HBD supply line for leaks (pad to mixing house)	7/20	12/1
• Replace/ regenerate HBD purifier and driers (late Fall)	7/20	12/1
• Send mass flowmeters out for recalibration (DC/PC, MuID, TOF.W)	7/20	12/1
• Replace pad chamber flowmeters in IR, re-label	7/20	12/1
• Investigate Mutr station 2 gas loss. Confirm labeling	7/20	12/1
• Replace/upgrade gas house PC's	7/20	12/1
• Move MuID distribution panel, for future RPC access	7/20	12/1
• Re-route several gas lines in the RPC3 south gap	7/20	12/1

Continuing Tasks currently underway (cont'd)

Task	Start Date	End Date
• Install LV Dist modules in MuTrigger S.	7/20	12/1
• Remove temporary MegaPAC in sRPC1 rack and install new full MegaPAC and finish controls for it	7/20	12/1
• Run gas lines to North tunnel	7/20	12/1
• Design and build gas humidifier	7/20	12/1
• Layout and build North distribution panel	7/20	12/1
• Run Signal/control lines to north tunnel (line goes to IR panel first)	7/20	12/1
• Build RPC gas rack for mixing house	7/20	12/1
• Install electronic and Gas PC in gas house for RPC's	7/20	12/1



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Expected IR Configuration During Shutdown '09

- Now-10/1 MMS south, CM in run position, EC in AH
WC in west position (against wall), scaffolding
in station 1 and station 2/3 south
- 9/25-11/10 MMS, CM & WC positions TBD, EC in AH
- 11/10-12/1 MMS & CM in run position, EC and WC can be
moved east west ~3 ft

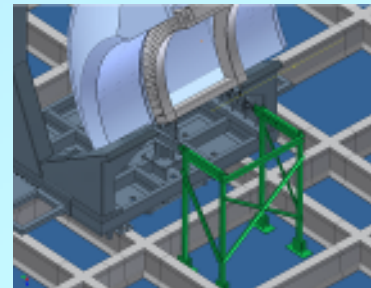
These dates are approximate and subject to change

September Schedule

Task

Start Date End Date

- Labor Day Holiday - no work 9/7 9/7
- Remove failed PC1 east module 9/10 9/14
- Install spare PC1 east module 9/10 9/14
- Install 2 RPC3 N racks (1/2 day) 9/8 9/18
- Test PC1 spare and verify operation 9/14 9/17
- **Remove RPC Absorber (Lead) from south flower pot area 9/15 9/15**
- Final leak test new Ar dewar/vaporizer and Closeout job 9/15 10/30
- DCM rack electric prep 9/1 12/1
- Close MMN Hatch and closeout WP 9/30 10/30
- Move DC on EC back to normal position 9/18 9/18
- Reconnect cables and piping on DC and PC1 East 9/21 9/25
- Remove station 1 south scaffolding 9/21 9/25
- Install rack components in RPC3 N racks 9/21 9/30
- Final verification tests on PC1 east repair 9/28 9/30



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October Schedule

Task

Start Date

End Date

- Disassemble and store PC1 east repair fixture 10/1 10/2
- Attach cables to RPC3 N racks and to Detector $\frac{1}{2}$ octants 10/1 10/9
- Install new PHENIX north tunnel thermal/vapor barrier replacing crystal palace (1 week) 10/1 10/30
- DCM rack supply & Return plumbing 10/5 10/16
- Remove MMS Sta 2/3 scaffolding 10/12 10/23
- Commission RPC3 N racks and detectors 10/12 10/30
- DCM rack internal plumbing 10/19 10/30
- Reinstall MMS lampshades (2 days) 10/26 10/30
- Replace hoses under EC 10/26 10/30



November Schedule

Task

Start Date

End Date

TECHNICAL SUPPORT ROOM

- Install heaters and thermostat(s) for RPC3N thermal control 11/2 11/6
- Reinstall PHENIX North tunnel shielding (3 days) 11/2 11/6
- Cooldown for Run 10 Starts 11/7 11/7
- Move MuID Collars to IR 11/7 11/7
- Disconnect electric & Fiber in EC 11/2 11/7
- Remove ladder & dumb waiter from EC & Fold up EC platforms in AH (1 day) 11/9 11/10
- Veterans Day Holiday - no work 11/11 11/11
- Remove IR Floor plates and move 12 ton cart to AH 11/12 11/12
- Move EC to IR 11/12 11/13
- Reconnect electric and fiber to EC 11/16 11/20
- Reinstall ladder & dumb waiter on EC & Fold down EC platforms in IR (1 day) 11/16 11/20
- Pink sheets, white sheets, blue sheets 11/16 12/1
- Move MMS north, Install MuID Collars 11/23 11/25
- Assemble shield wall base and wall in AH 11/23 11/30
- Thanksgiving Holiday - no work 11/26 11/27
- Roll in shield wall 11/30 11/30
- Start Run 10, All shutdown activities completed 12/1 12/1

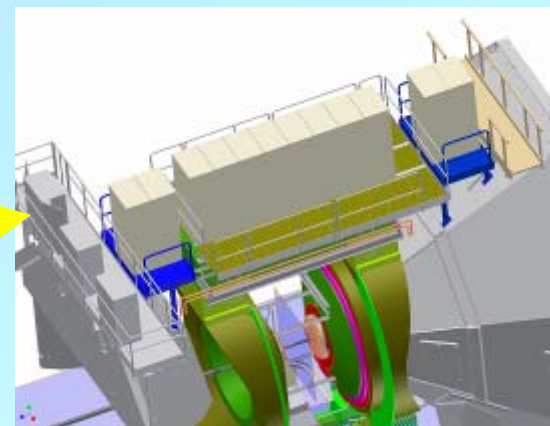


Other potential work this shutdown:

1. Remove the RPC prototype absorber

Confirmed: this to be done while
Station 1 scaffolding is in place

2. Prep Bridge for future upgrades
(if time permits)



More work to be scheduled

Purchase and install 2 AC's in
Phenix Gas Mixing House

Suggested model ;

Mcmaster part number: 1817K89
19.5 K btu

Per R. Pisani



2009 Building Maintenance Issues

TECHNICAL SUPPORT NOON

- Roof leaks in utility bathroom at northwest corner behind tech offices and over door between rack room and assembly hall.: *Roof Repairs underway*
- Heat wrap tape for trailer bathroom toilet drains to prevent freeze/clogging in winter.
- Improved Rack Room AC performance: *New AC on order*
- Icy conditions at mixing house north stairs: *See next item*
- Mixing House loose board?: *See next item*
- General maintenance for Trailer Offices and Gas Mixing House stairs, ramps and siding, gutters, etc. (cleaning and repairing worn/rotted wood): *Carter has placed work orders*



1. Scaffold Inspector training being given at BNL by Steve Kane 9/21 & 9/24
2. Tours should not go past the top of the Rack room stairs during work hours. PC 1 work.
3. Hardhats required when overhead crane is in use. No exceptions. Techs have the ultimate authority in AH and IR during shutdown.
4. All techs have more than enough work. Subsystems needing assistance should not attempt to schedule techs directly. See Carter or me if you need tech assistance.

Where To Find PHENIX Engineering Info



Coming Up:

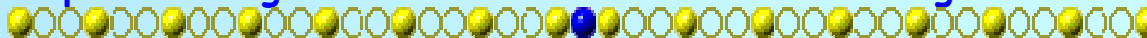
Lab Holiday

9/7

Labor Day

Links for the weekly planning meeting slides, archives of past meeting slides, long term planning, pictures, videos and other technical info can be found on the PHENIX Engineering web site:

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm



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